

**IN THE SPECIFICATION:**

Page 2, please insert the following new paragraph before the first line:

This is a divisional of application Serial No. 10/408,365, filed April 8, 2003, which is a divisional of application Serial No. 09/915,645, filed July 27, 2001, now U.S. Patent No. 6,604,127, issued August 5, 2003, which is a continuation of application Serial No. 09/417,908, filed October 13, 1999, now abandoned, which is a continuation of application Serial No. 09/044,931, filed March 20, 1998, issued as U.S. Patent No. 6,185,611, which claims the benefit of U.S. Provisional Application No. 60/076,048, filed February 26, 1998, all of which are incorporated herein by reference.

Page 2, edit paragraph 2 as follows:

The following identified U.S. patents and patent applications are relied upon and are incorporated by reference in this application.

Page 2, paragraph 3 through page 3, paragraph 13, please edit as follows:

~~U.S. Provisional Application No. 60/138,680, entitled "Jini™ Technology Helper Utilities and Services," bearing attorney docket no. 06502.6010-00000.~~

~~Provisional U.S. Patent Application No. 60/076,048, entitled "Distributed Computing System," filed on February 26, 1998.~~

~~U.S. Patent Application No. 09/044,923, entitled "Method and System for Leasing Storage," bearing attorney docket no. 06502.0011-01000.~~

~~U.S. Patent Application No. 09/044,838, entitled "Method, Apparatus and Product for Leasing of Delegation Certificates in a Distributed System," bearing attorney docket no. 06502.0011-02000.~~

~~U.S. Patent Application No. 09/044,834, entitled "Method, Apparatus and Product for Leasing of Group Membership in a Distributed System," bearing attorney docket no. 06502.0011-03000.~~

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~~U.S. Patent Application No. 09/044,933, entitled "Method for Transporting Behavior in Event Based System," bearing attorney docket no. 06502.0054-00000.~~

~~U.S. Patent Application No. 09/044,919, entitled "Deferred Reconstruction of Objects and Remote Loading for Event Notification in a Distributed System," bearing attorney docket no. 06502.0062-01000.~~

~~U.S. Patent Application No. 09/045,652, entitled "Method and System for Deterministic Hashes to Identify Remote Methods," bearing attorney docket no. 06502.0103-00000.~~

~~U.S. Patent Application No. 09/044,790, entitled "Method and Apparatus for Determining Status of Remote Objects in a Distributed System," bearing attorney docket no. 06502.0104-00000.~~

~~U.S. Patent Application No. 09/044,930, entitled "Downloadable Smart Proxies for Performing Processing Associated with a Remote Procedure Call in a Distributed System," bearing attorney docket no. 06502.0105-00000.~~

~~U.S. Patent Application No. 09/044,917, entitled "Suspension and Continuation of Remote Methods," bearing attorney docket no. 06502.0106-00000.~~

~~U.S. Patent Application No. 09/044,835, entitled "Method and System for Multi-Entry and Multi-Template Matching in a Database," bearing attorney docket no. 06502.0107-00000.~~

~~U.S. Patent Application No. 09/044,839, entitled "Method and System for In-Place Modifications in a Database," bearing attorney docket no. 06502.0108-00000.~~

~~U.S. Patent Application No. 09/044,945, entitled "Method and System for Typesafe Attribute Matching in a Database," bearing attorney docket no. 06502.0109-00000.~~

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~~U.S. Patent Application No. 09/044,939, entitled "Apparatus and Method for Providing Downloadable Code for Use in Communicating with a Device in a Distributed System," bearing attorney docket no. 06502.0112-00000.~~

~~U.S. Patent Application No. 09/044,826, entitled "Method and System for Facilitating Access to a Lookup Service," bearing attorney docket no. 06502.0113-00000.~~

~~U.S. Patent Application No. 09/044,932, entitled "Apparatus and Method for Dynamically Verifying Information in a Distributed System," bearing attorney docket no. 06502.0114-00000.~~

~~U.S. Patent Application No. 09/030,840, entitled "Method and Apparatus for Dynamic Distributed Computing Over a Network," and filed on February 26, 1998.~~

~~U.S. Patent Application No. 09/044,936, entitled "An Interactive Design Tool for Persistent Shared Memory Spaces," bearing attorney docket no. 06502.0116-00000.~~

~~U.S. Patent Application No. 09/044,934, entitled "Polymorphic Token-Based Control," bearing attorney docket no. 06502.0117-00000.~~

~~U.S. Patent Application No. 09/044,915, entitled "Stack-Based Access Control," bearing attorney docket no. 06502.0118-00000.~~

~~U.S. Patent Application No. 09/044,944, entitled "Stack-Based Security Requirements," bearing attorney docket no. 06502.0119-00000.~~

~~U.S. Patent Application No. 09/044,837, entitled "Per Method Designation of Security Requirements," bearing attorney docket no. 06502.0120-00000.~~

U.S. Provisional Application No. 60/138,680, entitled "Jini™ Technology Helper Utilities and Services," filed on June 14, 1999.

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U.S. Provisional Application No. 60/076,048, entitled "Distributed Computing System," filed on February 26, 1998.

U.S. Patent Application No. 09/044,923, now U.S. Patent No. 6,263,350, entitled "Method and System for Leasing Storage."

U.S. Patent Application No. 09/044,838, now U.S. Patent No. 6,247,026, entitled "Method, Apparatus and Product for Leasing of Delegation Certificates in a Distributed System."

U.S. Patent Application No. 09/044,834, now U.S. Patent No. 6,421,704, entitled "Method, Apparatus and Product for Leasing of Group Membership in a Distributed System."

U.S. Patent Application No. 09/044,933, now U.S. Patent No. 6,463,446, entitled "Method for Transporting Behavior in Event Based System."

U.S. Patent Application No. 09/044,919, now U.S. Patent No. 6,272,559, entitled "Deferred Reconstruction of Objects and Remote Loading for Event Notification in a Distributed System."

U.S. Patent Application No. 09/045,652, now U.S. Patent No. 6,134,603, entitled "Method and System for Deterministic Hashes to Identify Remote Methods."

U.S. Patent Application No. 09/044,790, now U.S. Patent No. 6,598,094, entitled "Method and Apparatus for Determining Status of Remote Objects in a Distributed System."

U.S. Patent Application No. 09/044,930, now U.S. Patent No. 6,393,497, entitled "Downloadable Smart Proxies for Performing Processing Associated with a Remote Procedure Call in a Distributed System."

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U.S. Patent Application No. 09/044,917, now U.S. Patent No. 6,237,024, entitled  
"Method and Apparatus for the Suspension and Continuation of Remote Processes."

U.S. Patent Application No. 09/044,835, now U.S. Patent No. 6,182,083, entitled  
"Method and System for Multi-Entry and Multi-Template Matching in a Database."

U.S. Patent Application No. 09/044,839, entitled "Method and System for In-  
Place Modifications in a Database," now abandoned.

U.S. Patent Application No. 09/044,945, now U.S. Patent No. 6,578,044, entitled  
"Method and System for Typesafe Attribute Matching in a Database."

U.S. Patent Application No. 09/044,939, now U.S. Patent No. 6,560,656, entitled  
"Apparatus and Method for Providing Downloadable Code for Use in Communicating  
with a Device in a Distributed System," filed March 20, 1998.

U.S. Patent Application No. 09/044,826, entitled "Method and System for  
Facilitating Access to a Lookup Service," filed March 20, 1998.

U.S. Patent Application No. 09/044,932, now U.S. Patent No. 6,466,947, entitled  
"Apparatus and Method for Dynamically Verifying Information in a Distributed System."

U.S. Patent Application No. 09/030,840, now U.S. Patent No. 6,446,070, entitled  
"Method and Apparatus for Dynamic Distributed Computing Over a Network."

U.S. Patent Application No. 09/044,936, entitled "An Interactive Design Tool for  
Persistent Shared Memory Spaces," now abandoned.

U.S. Patent Application No. 09/044,934, now U.S. Patent No. 6,438,614, entitled  
"Polymorphic Token-Based Control."

U.S. Patent Application No. 09/044,915, now U.S. Patent No. 6,138,238, entitled  
"Stack-Based Access Control."

U.S. Patent Application No. 09/044,944, now U.S. Patent No. 6,226,746, entitled  
"Stack-Based Security Requirements."

U.S. Patent Application No. 09/044,837, now U.S. Patent No. 6,282,652, entitled  
"Per-Method Designation of Security Requirements."

Page 7, edit the second paragraph, lines 3 and 4, as follows:

Figures 12A and 12B depict ~~Figure 12 depicts~~ a flow chart of the steps performed  
by a second query processing algorithm contained within the client lookup manager;  
and

Page 9, fourth full paragraph (beginning at line 28) through page 10, line 8, edit  
as follows:

The discovery server 214 detects when a new device is added to the exemplary  
distributed system 100, during a process known as boot and join or discovery, and  
when such a new device is detected, the discovery server passes a reference to the  
lookup service 212 to the new device, so that the new device may register its services  
with the lookup service and become a member of the Djinn. After the device discovers  
the lookup service 212, the device may access any of the services registered with the  
lookup service 212. Furthermore, the device may also advertise its own services by  
registering with the lookup service 212. Once registered, the services provided by the  
device may be accessed through the lookup service 212, by all other entities that also  
discover lookup service 212. The process of boot and join is described in greater detail  
in ~~co~~pending U.S. Patent Application No. 09/044,939, now U.S. Patent No. 6,560,656,  
entitled "Apparatus and Method for ~~providing~~ Providing Downloadable Code for Use in  
Communicating with a Device in a Distributed System," which has previously been  
incorporated by reference.

Page 16, edit line 3 of the second paragraph as follows:

The "notify" method is used to register for event notification. The registration is leased, and the lease expiration request is exact. The concept of a lease is described in greater detail in U.S. Patent Application No. 09/044,923, now U.S. Patent No. 6,263,350, entitled "Method and System for Leasing Storage," which has previously been incorporated by reference. The registration is persistent across restarts of the lookup service until the lease expires or is canceled. The event id in the returned EventRegId is unique at least with respect to all other active event registrations at this lookup service with different service templates of transitions.

Page 17, edit lines 5 and 6 of the fourth paragraph as follows:

Figures 3A and 3B depict a flowchart of the steps performed when a client, a program running on a particular device, makes use of the lookup service 212. Initially, the device on which the client runs is connected to the Jini distributed system (302). Next, the client sends a multi-cast packet containing code for communication with the client (step 304). In this step, the client is performing the discovery protocol as described in further detail in ~~co-pending~~ U.S. Patent Application No. 09/044,945, No. 09/044,945, now U.S. Patent No. 6,578,044, entitled "Apparatus and Method for Providing Downloadable Code for Use in Communication With a Device in a Distributed System," which has previously been incorporated by reference.

Page 21, edit the second full paragraph beginning on line 22 through page 22, line 2, as follows:

As shown in ~~FIG. 12~~ Figures 12A and 12B, if a requested service reference is not found in the cache or if an insufficient number of references is retrieved (in the case of a client request for multiple references), the client lookup manager can re-query the associated lookup services. As shown in step 1200, this form of lookup takes as input an integer argument (MaxMatches) that represents the maximum number of matches that should be returned. In other words, the object returned by this method will contain no more than that number of service references, although it may contain less. This

method also takes an integer argument (WAIT) that indicates the maximum amount of time the process is to wait before returning the identified service references. This argument prevents the client lookup manager from attempting to discover a requested number of MaxMatches for an infinite period of time. This feature is particularly useful to a user who is interested in choosing a service from a list of possible candidates instead of receiving a single service.

Page 22, edit the second full paragraph, line 23, through page 23, line 15, as follows:

The "wait" feature is quite useful to entities that cannot proceed until such a service of interest is found. As shown in ~~FIG. 12~~ Figures 12A and 12B, entities wishing to employ this feature must input a positive value to the WAIT argument which represents the number of milliseconds to wait for the desired service or services to be discovered. If a non-positive value is input to this argument, then this method will not wait. It will simply query all available lookup services once, and return the array of identified ServiceItem objects. If WAIT has been invoked and the elapsed time exceeds the WAIT duration, the process continues to step 1270, returns the array of ServiceItem objects found thus far and then the process terminates. On the other hand, if WAIT has been invoked and the duration has not been exceeded, the process continues to step 1291 and the client lookup manager registers with the event mechanism of the discovered lookup services. The event mechanism requests the lookup services notify the client lookup manager when one of the lookup service's associated networks services changes. When a service changes, the client lookup manager determines whether the new service is a service of interest in step 1292. If the service is of interest, it is recorded in the ServiceItem array (step 1293). Otherwise, execution flows to step 1296 where the process determines whether the elapsed time is less than or equal to the WAIT duration. If it is, the client lookup manager waits to be notified of a new service. If the time has expired, the client lookup manager returns the array of ServiceItem objects found thus far in step 1295. Once a service is recorded in the



ServiceItem array (step 1293) the client lookup manager determines whether the number of ServiceMatches is less than MaxMatches. If it is, execution flows to step 1296 where the process determines whether the elapsed time is less than or equal to the WAIT duration. If the number of ServicesMatches is equal to MaxMatches, then the desired number of services has been found and process flows to step 1295 where the identified array is returned. It should be obvious to those skilled in the art that instead of an array of objects, this process could return an instance of an object without departing from the scope of this process. It should also be obvious to those skilled in the art that instead of returning when the total number of references equals the maxMatches object, this method could instead return once a minimum number of references (minMatches) have been found.